

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (*Currently Amended*) A rotor for a permanent magnet motor of an outer rotor type, the rotor having a plurality of permanent magnets and disposed around a stator, the rotor comprising:

a frame;

an annular iron core combined integrally with the frame; and

a plurality of insertion holes formed in the core so that the permanent magnets are inserted in the insertion holes respectively,

wherein the frame, the core and the permanent magnets are combined integrally with one another by a synthetic resin, and each insertion hole includes a magnet disposing portion in which the permanent magnet is disposed, a space portion located in at least one of circumferential both ends of each permanent magnet disposed in the magnet disposing portion, and a positioning portion positioning each permanent magnet in the magnet disposing portion, and the molten synthetic resin is poured into the space portion.

2. (*Currently Amended*) A rotor for a permanent magnet motor of an outer rotor type, the rotor having a plurality of permanent magnets and disposed around a stator, the rotor comprising:

a frame;

an annular iron core combined integrally with the frame; and

a plurality of insertion holes formed in the core so that the permanent magnets are inserted in the insertion holes respectively,

wherein the frame, the core and the permanent magnets are combined integrally with each other by a synthetic resin, and each insertion hole includes a magnet disposing portion in which the permanent magnet is disposed and a recess defining a space along an outer periphery of each permanent magnet disposed in the magnet disposing portion, and the molten synthetic resin is poured into the recess according to claim 1, wherein the core includes magnetic poles having respective inner circumferential faces, and the core is

~~arranged so that a distance between the stator and the inner circumferential face of each magnetic pole is non-uniform with respect to a circumferential direction.~~

3. (*Currently Amended*) A rotor for a permanent magnet motor of an outer rotor type, the rotor having a plurality of permanent magnets and disposed around a stator, the rotor comprising:

a frame;

an annular iron core combined integrally with the frame; and

a plurality of insertion holes formed in the core so that the permanent magnets are inserted in the insertion holes respectively,

wherein the frame, the core and the permanent magnets are combined integrally with each other by a synthetic resin, and the core has a through hole from which a molten synthetic resin is poured. ~~according to claim 2, wherein the inner circumferential face of each magnetic pole of the core has two opposite ends having respective distances between the opposite ends and the stator, said distances between each opposite end and the stator core is shorter than a distance between a circumferentially central portion of the inner circumferential face and the stator.~~

4. (*Currently Amended*) The A rotor according to claim 3 4, wherein a distance from the through hole to the outer circumference of the core is shorter than a distance from an axial center in a portion of the core where the core has a maximum axial dimension, to the outer circumference of the core. ~~the core includes a plurality of trough portions provided between respective insertion holes adjacent to each other in the inner circumferential portion thereof, and a distance between an outer circumferential end of each trough and an outer circumferential portion of the core is smaller than a distance between a radial center of the core and the outer circumferential end of the core.~~

5. (*Currently Amended*) The A rotor according to claim 3 4, wherein the through hole is formed nearer to the outer circumference of the core than the permanent magnets in the core ~~each insertion hole has a generally V-shaped or arc section with respect to a direction perpendicular to a radial direction and each insertion hole has two opposite ends located at an inner circumferential side of the core, and each permanent magnet has a generally V-shaped or arc section corresponding to a configuration of each insertion hole.~~

6. (*Currently Amended*) The A rotor according to claim 3 4, wherein the through hole is formed in the core so as to be located between the magnetic poles. each insertion hole has a generally V shaped or arc section with respect to a direction perpendicular to a radial direction and each insertion hole has two opposite ends located at an inner circumferential side of the core, and the core has a plurality of magnetic poles each of which is composed of two permanent magnets provided in a circumferential one side of each insertion hole and the other side of each insertion hole respectively.

7. (*Currently Amended*) A rotor for a permanent magnet motor of an outer rotor type, the rotor having a plurality of permanent magnets and disposed around a stator, the rotor comprising:

a frame;

an annular iron core combined integrally with the frame;

a plurality of insertion holes formed in the core so that the permanent magnets are inserted in the insertion holes respectively, and

a plurality of trough portions formed in the core so as to be located between the respective insertion holes adjacent to each other in the inner circumferential portion thereof, the trough portions being filled with a synthetic resin.

according to claim 6, wherein each permanent magnet (60) is formed into a shape of a generally flat plate.

8. (*Currently Amended*) The A rotor according to claim 7 6, wherein a distance between an outer circumferential end of each trough portion and an outer circumferential portion of the core is smaller than a distance between a radial center of the core and the outer circumferential end of the core the frame includes an annular wall extending along an outer circumferential face of the core, and each insertion hole is open at the outer circumferential face of the core.

9. - 19. (*Cancelled*).